



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/686,021	10/16/2003	Arnold Craven	P5630.0000/P023-A	4885
24998	7590	10/19/2004	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L STREET NW WASHINGTON, DC 20037-1526			BRYANT, DAVID P	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

JW

Office Action Summary	Application No.	Applicant(s)
	10/686,021	CRAVEN, ARNOLD
	Examiner David P. Bryant	Art Unit 3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 August 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) 1-7,9 and 10 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 8 and 11-13 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>101603</u> .	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
--	--

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II (claims 8 and 11-13) in the reply filed on August 2, 2004, is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application can be made without serious burden. This is not found persuasive because, as noted in the restriction requirement, the two groups of claims have acquired a separate status in the art as shown by their separate classification. Separate classification is in itself generally sufficient to show a serious burden on the examiner. Further, the search for Group I is not required for the search of Group II.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-7, 9, and 10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Farrell (U.S. Patent No. 4,653,244).

Farrell teaches the claimed invention as set forth below:

A method of using a fastener comprising:

providing a fastener **10** having a shank **14**, a head **12**, a tapered section **16**, a first threaded section **22** and a second threaded section **28**, said first threaded section having threads **24** having a first pitch and said second threaded section having threads **30** having a second pitch different from said first pitch (column 3, lines 45-46);

engaging said tapered segment of said fastener with a remnant-producing material **48**;

rotating said fastener in the direction of said threads of the first threaded section thereby inserting said fastener into said remnant-producing material and producing remnants **52a** from said remnant-producing material (Figure 2A; column 4, lines 47-67);

rotating said fastener in the direction of said threads of the first threaded section after said second threaded section becomes engaged with said remnant-producing material thereby causing said second threaded section to capture said produced remnants (Figure 2B; column 5, lines 7-27); and

rotating said fastener until said head engages with said remnant-producing material (Figure 2D).

Claims 8 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Takasaki (U.S. Patent No. 6,000,892).

Takasaki teaches the claimed invention as set forth below:

Claim 8: A method of using a fastener comprising:

providing a fastener having a shank **1**, a head **2**, a tapered section **3**, a first threaded section **4** and a second threaded section **5**, said first threaded section having threads having a first

pitch and said second threaded section having threads having a second pitch different from said first pitch (column 2, lines 23-28);

engaging said tapered segment of said fastener with a remnant-producing material A1;

rotating said fastener in the direction of said threads of the first threaded section thereby inserting said fastener into said remnant-producing material and producing remnants (the bulge formed around the fastener in Figure 4A) from said remnant-producing material (column 2, lines 42-52);

rotating said fastener in the direction of said threads of the first threaded section after said second threaded section becomes engaged with said remnant-producing material thereby causing said second threaded section to capture said produced remnants (Figure 4B; column 2, lines 47-52); and

rotating said fastener until said head engages with said remnant-producing material (Figure 4C).

Claim 11: A method of clamping two structures A1, A2 together with a fastener, comprising:

providing a fastener having a shank 1, a head 2, a first threaded section 4 and a second threaded section 5, said first threaded section having threads having a first pitch and said second threaded section having threads having a second pitch different from said first pitch (column 2, lines 23-28);

engaging said first threaded section of said fastener with a first structure A1 (Figure 4A);

rotating said fastener in the direction of the threads of said first threaded section to insert said fastener into said first structure (Figure 4A);

rotating said fastener in the direction of said threads of the first threaded section after said second threaded section becomes engaged with said first structure and said first threaded section becomes engaged with said second structure **A2** (Figure 4B); and

rotating said fastener until said head engages with said first structure, wherein upon engagement of said head with said first structure said first threaded section is completely within said second structure (Figure 4C).

Claim 12: Upon said engagement of said head in said first structure, one end of said first threaded section is proximate to a pair of mating surfaces of said two structures (Figure 4C; the upper end of the first threaded section is proximate the mating surfaces).

Claim 13: The first structure **A1** is formed of remnant-producing material, said first threaded section producing remnants from said remnant-producing material and said second threaded section capturing said produced remnants (Figure 4A; column 2, lines 42-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell (U.S. Patent No. 4,653,244) in view of Habermehl et al. (U.S. Patent No. 6,074,149).

Claims 11 and 12: As best seen in Figures 1 and 2, Farrell teaches a method of clamping two structures **40, 50** together with a fastener **10**, comprising:

providing a fastener 10 having a shank 14, a head 12, a first threaded section 22 and a second threaded section 28, said first threaded section having threads 24 having a first pitch and said second threaded section having threads 30 having a second pitch different from said first pitch (column 3, lines 45-46);

engaging said first threaded section of said fastener with a first structure 40 (Figure 2A);

rotating said fastener in the direction of the threads of said first threaded section to insert said fastener into said first structure (Figures 2A, 2B);

rotating said fastener in the direction of said threads of the first threaded section after said second threaded section becomes engaged with said first structure and said first threaded section becomes engaged with said second structure 50 (Figure 2C); and

rotating said fastener until said head engages with said first structure, wherein upon engagement of said head with said first structure said first threaded section is within said second structure (Figure 2D).

Farrell fails to teach the first threaded section being *completely* within the second structure upon engagement of the head with the first structure, such that one end of said first threaded section is proximate to a pair of mating surfaces of said two structures.

Habermehl et al. teach joining together a first structure 40 and a second structure 42 using a threaded fastener 14 (see Figures 6-8). The fastener comprises a first threaded section 23 and a second threaded section 27, with the threads of each section differing in pitch (column 5, lines 23-27). The lengths of the threaded sections are sized such that the first threaded section is completely within the second structure 42 when the head 16 of the fastener is engaged with the

first structure **40**, and such that the upper end of the first threaded section is proximate to a pair of mating surfaces of the two structures.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have sized the fastener of Farrell such that the first threaded section is completely within the second structure when the head of the fastener is engaged with the first structure, and such that the upper end of the first threaded section is proximate to a pair of mating surfaces of the two structures, as taught by Habermehl et al., to ensure that the fastener utilizes the entire length of the first threaded section to apply an ideal clamping pressure to the two structures.

Claim 13: The first structure **40** is formed of remnant-producing material, said first threaded section producing remnants from said remnant-producing material and said second threaded section capturing said produced remnants (in Farrell, note Figure 2B and column 5, lines 7-27).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Bryant whose telephone number is (703) 308-1859. The examiner can normally be reached on Monday-Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 3726

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David P. Bryant
Primary Examiner
Art Unit 3726

dpb
10/14/04